AMENDED IN ASSEMBLY AUGUST 24, 2006
AMENDED IN ASSEMBLY AUGUST 21, 2006
AMENDED IN ASSEMBLY AUGUST 7, 2006
AMENDED IN ASSEMBLY JUNE 22, 2006
AMENDED IN SENATE APRIL 24, 2006

SENATE BILL

No. 1368

Introduced by Senator Perata

(Coauthor: Assembly Member Levine)

February 21, 2006

An act to add Chapter 3 (commencing with Section 8340) to Division 4.1 of the Public Utilities Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 1368, as amended, Perata. Electricity: emissions of greenhouse gases.

(1) Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities, including electrical corporations. *Existing law authorizes the PUC to establish rules for all public utilities, and the Legislature has established procedures for rulemaking proceedings before the PUC.* Existing law requires the PUC to review and adopt a procurement plan and a renewable energy procurement plan for each electrical corporation pursuant to the California Renewables Portfolio Standard Program.

Existing law requires the State Energy Resources Conservation and Development Commission (Energy Commission) to certify eligible renewable energy resources, to design and implement an accounting system to verify compliance with the renewables portfolio standard by

SB 1368 -2-

retail sellers, and to allocate and award supplemental energy payments to cover above-market costs of electricity generated by eligible renewable energy resources.

Under existing law the governing board of a local publicly owned electric utility is responsible for implementing and enforcing a renewables portfolio standard that recognizes the intent of the Legislature to encourage renewable resources, while taking into consideration the effect of the standard on rates, reliability, and financial resources and the goal of environmental improvement. Existing law requires the governing board of a local publicly owned electric utility to report certain information relative to renewable energy resources to its customers.

Existing law defines an "electric service provider" as an entity that offers electrical service to customers within the service territory of an electrical corporation, excluding electrical corporations, local publicly owned electric utilities, and certain cogenerators. Provisions of the existing Public Utilities Act restructuring the electrical services industry require that electric service providers register with the PUC and require the PUC to authorize and facilitate direct transactions between electric service providers and retail end-use customers. However, other existing law suspends the right of retail end-use customers other than community aggregators, to acquire service through a direct transaction, until the Department of Water Resources no longer supplies electricity under that law.

Existing law defines a "community choice aggregator" and authorizes customers to aggregate their electric loads as members of their local community with community choice aggregators.

The existing restructuring of the electrical industry within the Public Utilities Act provides for the establishment of an Independent System Operator (ISO) as a nonprofit public benefit corporation. Existing law requires the ISO to ensure efficient use and reliable operation of the transmission grid consistent with achieving planning and operating reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the American Electric Reliability Council.

Under existing law, the State Air Resources Board, the Energy Commission, and the California Climate Action Registry all have responsibilities with respect to the control of emissions of greenhouse gases, as defined, and the Secretary for Environmental Protection is -3- SB 1368

required to coordinate emission reductions of greenhouse gases and climate change activity in state government.

This bill would prohibit any load-serving entity, as defined, and any local publicly owned electric utility, from entering into a long-term financial commitment, as defined, unless any baseload generation, as defined, complies with a greenhouse gases emission performance standard. The bill would require the PUC, by February 1, 2007, at a duly noticed public hearing through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities. The bill would require the Energy Commission, by June 30, 2007, at a duly noticed public hearing and in consultation with the PUC and the State Air Resources Board, to establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities. The bill would require that the greenhouse gases emission performance standard not exceed the rate of emissions of greenhouse gases for combined-cycle natural gas, as defined, baseload generation. The bill would prohibit the PUC from approving any long-term financial commitment by an electrical corporation unless any baseload generation supplied under the long-term commitment complies with the greenhouse gases emission performance standard. The bill would authorize the PUC to review any long-term financial commitment proposed to be entered into by an electric service provider or community choice aggregator in order to enforce the bill's requirements. The bill would require the PUC to adopt rules to enforce these requirements for load-serving entities and would require the PUC to adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any baseload generation supplied under a contract subject to the greenhouse gases emission performance standard. The bill would require the PUC, in a duly noticed public hearing through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Control Board, to reevaluate and continue, modify, or replace the greenhouse gases emissions performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load-serving entities.

The bill would require the Energy Commission to adopt regulations for the enforcement of the greenhouse gases emission performance **SB 1368**

3

4

7

8

10

11 12

13

standard with respect to a local publicly owned electric utility. The bill would require the Energy Commission, in a duly noticed public hearing and in consultation with the PUC and the State Air Resources Board, to reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.

(2) Under existing law, a violation of the Public Utilities Act or an order or direction of the commission is a crime.

Because certain of the provisions of this bill are within the act and require action by the commission to implement its requirements, a violation of these provisions would impose a state-mandated local program by creating a new crime.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares all of the following:
 - (a) Global warming will have serious adverse consequences on the economy, health, and environment of California.
- (b) The Governor, in Executive Order S-3-05, has called for 6 the reduction of California's emission of greenhouse gases to 1990 levels by 2020.
 - (c) Over the past three decades, the state has taken significant strides towards implementing an environmentally economically sound energy policy through reliance on energy efficiency, conservation, and renewable energy resources in order to promote a sustainable energy future that ensures an adequate and reliable energy supply at reasonable and stable prices.
- 14 (d) To the extent energy efficiency and renewable resources 15 are unable to satisfy increasing energy and capacity needs, the Energy Action Plan II establishes a policy that the state will rely

5 SB 1368

on clean and efficient fossil fuel fired generation and will "encourage the development of cost-effective, highly-efficient, and environmentally-sound supply resources to provide reliability and consistency with the state's energy priorities."

- (e) California's investor-owned electric utilities currently have long-term procurement plans that include proposals for making new long-term financial commitments to electrical generating resources over the next decade, which will generate electricity while producing emissions of greenhouse gases for the next 30 years or longer. New long-term financial commitments—for electrical generating resources that eliminate all emissions of greenhouse gases, or that substantially reduce emissions of greenhouse gases, should be encouraged. to zero- or low-carbon generating resources should be encouraged.
- (f) The Public Utilities Commission (PUC) and State Energy Resources Conservation and Development Commission (Energy Commission) both have concluded, and the Legislature finds, that federal regulation of emissions of greenhouse gases is likely during this decisionmaking timeframe.
- (g) It is vital to ensure all electricity load-serving entities internalize the significant and underrecognized cost of emissions recognized by the PUC with respect to the investor-owned electric utilities, and to reduce California's exposure to costs associated with future federal regulation of these emissions.
- (h) The establishment of a policy to reduce emissions of greenhouse gases, including an emissions performance standard for all procurement of electricity by load-serving entities, is a logical and necessary step to meet the goals of the Energy Action Plan II and the Governor's goals for reduction of emissions of greenhouse gases.
- (i) A greenhouse gases emission performance standard for new long-term financial commitments to electrical generating resources will reduce potential financial risk to California consumers for future pollution-control costs.
- (j) A greenhouse gases emission performance standard for new long-term financial commitments to electric generating resources will reduce potential exposure of California consumers to future reliability problems in electricity supplies.
- (k) In order to have any meaningful impact on climate change, the Governor's goals for reducing emissions of greenhouse gases

SB 1368 -6-

the following meanings:

must be applied to the state's electricity consumption, not just the state's electricity production.

- (*l*) The 2005 Integrated Energy Policy Report adopted by the Energy Commission recommends that any greenhouse gases emission performance standard for utility procurement of baseload generation be set no lower than levels achieved by a new combined-cycle natural gas turbine.
- (m) As the largest electricity consumer in the region, California has an obligation to provide clear guidance on performance standards for procurement of electricity by load-serving entities.
- SEC. 2. Chapter 3 (commencing with Section 8340) is added to Division 4.1 of the Public Utilities Code, to read:

CHAPTER 3. GREENHOUSE GASES EMISSION PERFORMANCE STANDARD FOR BASELOAD ELECTRICAL GENERATING RESOURCES

8340. For purposes of this chapter, the following terms have

- (a) "Baseload generation" means electricity generation from a powerplant that is designed and intended to provide electricity at an annualized plant capacity factor of at least 60 percent.
- (b) "Combined-cycle natural gas" system of generation means the use of a natural gas combustion turbine generator and a steam turbine generator in a single plant to produce electricity. with respect to a powerplant means the powerplant employs a combination of one or more gas turbines and steam turbines in which electricity is produced in the steam turbine from otherwise lost waste heat exiting from one or more of the gas turbines.
- (c) "Community choice aggregator" means a "community choice aggregator" as defined in Section 331.1.
- (d) "Electrical corporation" means an "electrical corporation" as defined in Section 218.
- (e) "Electric service provider" means an "electric service provider" as defined in Section 218.3, but does not include corporations or persons employing cogeneration technology or producing electricity from other than a conventional power source consistent with subdivision (b) of Section 218.
- 39 (f) "Energy Commission" means the State Energy Resources 40 Conservation and Development Commission.

7 SB 1368

(g) "Greenhouse gases" means those gases listed in subdivision (h) of Section 42801.1 of the Health and Safety Code.

- (h) "Load-serving entity" means a "load-serving entity" as defined in subdivision (j) of Section 380.
- (i) "Local publicly owned electric utility" means a "local publicly owned electric utility" as defined in Section 9604.
- (j) "Long-term financial commitment" means either a new ownership investment in baseload generation or a new or renewed contract with a term of five or more years, which includes procurement of baseload generation.
- (k) "Output-based methodology" means a greenhouse gases emission performance standard that is expressed in pounds of greenhouse gases emitted per megawatthour and factoring in the useful thermal energy employed for purposes other than the generation of electricity.
- (*l*) "Plant capacity factor" means the ratio of the electricity produced during a given time period, measured in kilowatthours, to the electricity the unit could have produced if it had been operated at its rated capacity during that period, expressed in kilowatthours.
- (m) "Powerplant" means a facility for the generation of electricity, and includes one or more generating units at the same location.
- (n) "Zero- or low-carbon generating resource" means an electrical generating resource that will generate electricity while producing emissions of greenhouse gases at a rate substantially below the greenhouse gas emission performance standard, as determined by the commission.
- 8341. (a) No load-serving entity or local publicly owned electric utility may enter into a long-term financial commitment unless any baseload generation supplied under the long-term financial commitment complies with the greenhouse gases emission performance standard established by the commission, pursuant to subdivision (d), for a load-serving entity, or by the Energy Commission, pursuant to subdivision (e), for a local publicly owned electric utility.
- 38 (b) (1) The commission shall not approve a long-term 39 financial commitment by an electrical corporation unless any 40 baseload generation supplied under the long-term financial

SB 1368 -8-

commitment complies with the greenhouse gases emission performance standard established by the commission pursuant to subdivision (d).

- (2) The commission may, in order to enforce the requirements of this section, review any long-term financial commitment proposed to be entered into by an electric service provider or a community choice aggregator.
- (3) The commission shall adopt rules to enforce the requirements of this section, for load-serving entities. The commission shall adopt procedures, for all load-serving entities, to verify the emissions of greenhouse gases from any baseload generation supplied under a contract subject to the greenhouse gases emission performance standard to ensure compliance with the standard.
- (4) In determining whether a long-term financial commitment is for baseload generation, the commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit or certificate necessary for the operation of the powerplant, including a certificate of public convenience and necessity, any procurement approval decision for the load-serving entity, and any other matter the commission determines is relevant under the circumstances.
- (5) Costs incurred by an electrical corporation to comply with this section, including those costs incurred for electricity purchase agreements that are approved by the commission that comply with the greenhouse gases emission performance standard, are to be treated as procurement costs incurred pursuant to an approved procurement plan and the commission shall ensure timely cost recovery of those costs pursuant to paragraph (3) of subdivision (d) of Section 454.5.
- (6) A long-term financial commitment entered into through a contract approved by the commission, for electricity generated by a zero- or low-carbon generating resource that is delivered to contracted for, on behalf of consumers of this state on a cost-of-service basis, shall be recoverable in rates, in a manner determined by the commission consistent with Section 380. The commission may, after a hearing, approve an increase from one-half to 1 percent in the rate of return otherwise allowed on an

-9- SB 1368

return on investment by the third party entering into the contract with an electrical corporation with respect to investment in zeroor low-carbon generation resources authorized pursuant to this subdivision.

- (c) (1) The Energy Commission shall adopt regulations for the enforcement of this chapter with respect to a local publicly owned electric utility.
- (2) The Energy Commission may, in order to ensure compliance with the greenhouse gases emission performance standard by local publicly owned electric utilities, apply the procedures adopted by the commission to verify the emissions of greenhouse gases from baseload generation pursuant to subdivision (b).
- (3) In determining whether a long-term financial commitment is for baseload generation, the Energy Commission shall consider the design of the powerplant and the intended use of the powerplant, as determined by the Energy Commission based upon the electricity purchase contract, any certification received from the Energy Commission, any other permit for the operation of the powerplant, any procurement approval decision for the load-serving entity, and any other matter the Energy Commission determines is relevant under the circumstances.
- (d) (1) On or before February 1, 2007, the commission, at a duly noticed public hearing through a rulemaking proceeding, and in consultation with the Energy Commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of load-serving entities, at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. All powerplants using a combined-cycle natural gas system for generation of electricity Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.
- (2) In determining the rate of emissions of greenhouse gases for baseload generation, the commission shall include the net

SB 1368 -10-

1 emissions resulting from the production of electricity by the 2 baseload generation.

- (3) The commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gases emitted by the facility in the production of both electrical and thermal energy.
- (4) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.
- (5) Carbon dioxide that is captured from the emissions of a powerplant and that is permanently disposed of in geological formations in compliance with applicable laws and regulations, shall not be counted as emissions from the powerplant.
- (6) In adopting and implementing the greenhouse gases emission performance standard, the commission, in consultation with the Independent System Operator shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (7) In developing and implementing the greenhouse gases emission performance standard, the commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (8) In developing and implementing the greenhouse gases emission performance standard, the commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (9) An electrical corporation that provides electric service to 75,000 or fewer retail end-use customers in California may file with the commission a proposal for alternative compliance with this section, which the commission may accept upon a showing by the electrical corporation of both of the following:
- (A) A majority of the electrical corporation's retail end-use customers for electric service are located outside of California.
- (B) The emissions of greenhouse gases to generate electricity for the retail end-use customers of the electrical corporation are subject to a review by the utility regulatory commission of at

-11- SB 1368

least one other state in which the electrical corporation provides regulated retail electric service.

2

3

4

5

7

8

10

11 12

13

14

15

16 17

18

19

20 21

22

23

24 25

26

2728

29

30

31

32

33

34

35

36 37

38 39

- (e) (1) On or before June 30, 2007, the Energy Commission, at a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall establish a greenhouse gases emission performance standard for all baseload generation of local publicly owned electric utilities at a rate of emissions of greenhouse gases that is no higher than the rate of emissions of greenhouse gases for combined-cycle natural gas baseload generation. The greenhouse gases performance standard established by the Energy Commission for local publicly owned electric utilities shall be consistent with the standard adopted by the commission for load-serving entities. All powerplants using a combined-cycle natural gas system for generation of electricity Enforcement of the greenhouse gases emission performance standard shall begin immediately upon the establishment of the standard. All combined-cycle natural gas powerplants that are in operation, or that have an Energy Commission final permit decision to operate as of June 30, 2007, shall be deemed to be in compliance with the greenhouse gases emission performance standard.
- (2) The greenhouse gases emission performance standard shall be adopted by regulation pursuant to the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code).
- (3) In determining the rate of emissions of greenhouse gases for baseload generation, the Energy Commission shall include the net emissions resulting from the production of electricity by the baseload generation.
- (4) The Energy Commission shall establish an output-based methodology to ensure that the calculation of emissions of greenhouse gases for cogeneration recognizes the total usable energy output of the process, and includes all greenhouse gas emitted by the facility in the production of both electrical and thermal energy.
- (5) In calculating the emissions of greenhouse gases by facilities generating electricity from biomass, biogas, or landfill gas energy, the Energy Commission shall consider net emissions from the process of growing, processing, and generating the electricity from the fuel source.

SB 1368 -12-

(6) Carbon dioxide that is captured from the emissions of a powerplant and that is permanently disposed of in geological formations in compliance with applicable laws and regulations, shall not be counted as emissions from the powerplant.

- (7) In adopting and implementing the greenhouse gases emission performance standard, the Energy Commission, in consultation with the Independent System Operator, shall consider the effects of the standard on system reliability and overall costs to electricity customers.
- (8) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall address long-term purchases of electricity from unspecified sources in a manner consistent with this chapter.
- (9) In developing and implementing the greenhouse gases emission performance standard, the Energy Commission shall consider and act in a manner consistent with any rules adopted pursuant to Section 824a-3 of Title 16 of the United States Code.
- (f) The Energy Commission, in a duly noticed public hearing and in consultation with the commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to local publicly owned electric utilities.
- (g) The commission, in a duly noticed public hearing through a rulemaking proceeding and in consultation with the Energy Commission and the State Air Resources Board, shall reevaluate and continue, modify, or replace the greenhouse gases emission performance standard when an enforceable greenhouse gases emissions limit is established and in operation, that is applicable to load serving entities.
- SEC. 3. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a

—13 — SB 1368

- 1 crime within the meaning of Section 6 of Article XIII B of the California Constitution.